

TABLE 1

F01P50-46445860

Fold      Con      FSH      **FSH regulates 189 genes in Y1 cells**

GeneName	
IMAGE EST {IMAGE:598824}	
MYELOID DIFFERENTIATION PRIMARY RESPONSE PROTEIN MYD116 {IMAGE:475803}	
Extracellular matrix protein 1 {IMAGE:874833}	
Extracellular matrix protein 1 {IMAGE:678765}	
ESTs, Weakly similar to cDNA EST EMBL:D75506 comes from this gene [C.elegans] {IMAGE:334182}	
NAD-DEPENDENT METHYLENETETRAHYDROFOLATE DEHYDROGENASE {IMAGE:406031}	
ESTs, Highly similar to CYSTATIONINE GAMMA-LYASE [Homo sapiens] {IMAGE:679235}	
Mus musculus secreted carbonic anhydrase Isozyme VI precursor, mRNA, complete cds {IMAGE:32994}	
ESTs {IMAGE:482641}	
ESTs, Highly similar to SERINE HYDROXYMETHYLTRANSFERASE, MITOCHONDRIAL [Oryctolagus cui	
Antigen identified by monoclonal antibodies 4F2 {IMAGE:478301}	
ESTs {IMAGE:426033}	
IMAGE EST {IMAGE:656089}	
IMAGE EST {IMAGE:818790}	
IMAGE EST {IMAGE:574227}	
ESTs {IMAGE:749313}	
Mouse mRNA for dbpa murine homologue, complete cds {IMAGE:481949}	
IMAGE EST {IMAGE:315676}	
IMAGE EST {IMAGE:467785}	
ESTs {IMAGE:876063}	
Mus musculus A10 mRNA, partial cds {IMAGE:385441}	
IMAGE EST {IMAGE:367765}	
ESTs, Highly similar to CYSTATIONINE GAMMA-LYASE [Homo sapiens] {IMAGE:525119}	
Glutamate oxaloacetate transaminase 1, soluble {IMAGE:481381}	
M.musculus mRNA for mtGIF protein {IMAGE:474339}	
Heat shock protein, 74 kDa {IMAGE:444027}	
Myelocytomatosis oncogene {IMAGE:441346}	
Mouse chromatin nonhistone high mobility group protein (HGM-1(Y), complete cds {IMAGE:920268}	
Glycine transporter 1 {IMAGE:420070}	
IMAGE EST {IMAGE:681424}	
Hormone receptor {IMAGE:439773}	
ESTs {IMAGE:404057}	
ESTs, Weakly similar to Tid56 protein [D.melanogaster] {IMAGE:478167}	
Heme oxygenase (decycling) 1 {IMAGE:677499}	

-2.4	452	1073	ESTs, Highly similar to PUTATIVE ASPARAGINYL-TRNA SYNTHETASE DED81 [Saccharomyces cerevi:
-2.4	351	836	IMAGE EST {IMAGE:479247}
-2.4	310	752	IMAGE EST {IMAGE:640085}
-2.3	621	1402	IMAGE EST {IMAGE:466678}
-2.3	514	1197	Mus musculus thiredoxin mRNA, nuclear gene encoding mitochondrial protein, complete cds {IMAGE:
-2.3	462	1041	IMAGE EST {IMAGE:622893}
-2.3	430	996	ESTs, Weakly similar to RING zinc finger protein [M.musculus] {IMAGE:922965}
-2.3	335	779	Mus musculus signal recognition particle receptor beta subunit mRNA, complete cds {IMAGE:482029}
-2.3	311	706	Mus musculus SH3-containing protein SH3P2 mRNA, partial cds {IMAGE:458781}
-2.3	261	589	Hormone receptor {IMAGE:641865}
-2.3	185	421	Heat shock protein, 74 kDa {IMAGE:889543}
-2.2	904	2014	ESTs, Highly similar to DELTA 1-PYRROLINE-5-CARBOXYLATE SYNTHETASE [Vigna aconitifolia] {IMA
-2.2	387	853	ESTs {IMAGE:751826}
-2.2	367	807	IMAGE EST {IMAGE:437685}
-2.2	366	817	ESTs {IMAGE:350182}
-2.2	318	684	Metallothionein 1 {IMAGE:480920}
-2.2	164	358	Mus musculus A10 mRNA, partial cds {IMAGE:333376}
-2.1	1010	2082	ESTs {IMAGE:479076}
-2.1	713	1474	Nuclear, factor, erythroid derived 2, like 2 {IMAGE:475505}
-2.1	640	1338	Metallothionein 1 {IMAGE:480068}
-2.1	599	1257	M.musculus mRNA for mTGLF protein {IMAGE:722623}
-2.1	584	1235	Mus musculus asparagine synthetase mRNA, complete cds {IMAGE:337748}
-2.1	429	900	ESTs {IMAGE:477003}
-2.1	229	473	IMAGE EST {IMAGE:483649}
-2.1	135	283	ESTs {IMAGE:637891}
-2	2153	4367	RAB1, member RAS oncogene family {IMAGE:619501}
-2	992	2008	ESTs, Highly similar to HYPOTHETICAL TRP-ASP REPEATS CONTAINING PROTEIN C29E6.01 IN CHRC
-2	842	1646	Mus musculus BM28 homolog mRNA, complete cds {IMAGE:441229}
-2	263	533	IMAGE EST {IMAGE:790122}
-2	215	440	IMAGE EST {IMAGE:481400}
-2	101	199	HEMATOPOIETIC CELL PROTEIN-TYROSINE PHOSPHATASE 70Z-PEP {IMAGE:574608}
2	10139	5129	Procollagen, type III, alpha 1 {IMAGE:420322}
2	2390	1169	Caveolin, caveolae protein, 22 kDa {IMAGE:331186}
2	1183	583	ESTs {IMAGE:425777}
2	997	509	ESTs, Moderately similar to CYTOCHROME B5, OUTER MITOCHONDRIAL MEMBRANE [Rattus norvegi
2	717	363	Mus musculus L6 antigen mRNA, complete cds {IMAGE:733601}
2	643	317	IMAGE EST {IMAGE:437564}

2	587	287	IMAGE EST {IMAGE:949532}
2	538	268	Carnitine palmitoyltransferase 1, liver {IMAGE:717056}
2	494	248	IMAGE EST {IMAGE:477521}
2	391	199	Nucleoside phosphorylase {IMAGE:607469}
2	322	160	ESTs {IMAGE:847082}
2	300	148	ESTs, highly similar to MITOTIC MAD2 PROTEIN [Saccharomyces cerevisiae] {IMAGE:426406}
2	281	140	ESTs {IMAGE:443276}
2	278	140	IMAGE EST {IMAGE:465043}
2	271	135	ESTs {IMAGE:597249}
2	227	116	ESTs {IMAGE:948588}
2	210	107	Mus musculus retinoid X receptor interacting protein (RIP14-1No.6) mRNA, complete cds {IMAGE:7478}
2	208	104	ESTs, highly similar to PROTEIN 4.1 [Homo sapiens] {IMAGE:597748}
2	200	100	ESTs, weakly similar to cDNA EST EMBL:D71941 comes from this gene [C.elegans] {IMAGE:746649}
2	165	84	ESTs, weakly similar to cyclin E [M.musculus] {IMAGE:791957}
2	156	79	IMAGE EST {IMAGE:466591}
2	148	74	GLUTAMINE SYNTHETASE {IMAGE:693146}
2	143	71	ESTs {IMAGE:765727}
2	133	66	ESTs {IMAGE:619895}
2.1	1848	889	Mus musculus thioredoxin peroxidase (Tpx) mRNA, complete cds {IMAGE:579867}
2.1	1817	885	Aquaporin 1 {IMAGE:656654}
2.1	1131	541	Caveolin, caveolae protein, 22 kDa {IMAGE:596968}
2.1	1013	482	NEURONAL PROTEIN 3.1 {IMAGE:733420}
2.1	732	347	Procollagen, type XI, alpha 1 {IMAGE:423028}
2.1	586	277	ESTs, weakly similar to cDNA EST YK486b9.3 comes from this gene [C.elegans] {IMAGE:697835}
2.1	402	195	Mus musculus mRNA for mouse rabaptin-5, complete cds {IMAGE:718521}
2.1	379	179	IMAGE EST {IMAGE:817962}
2.1	363	177	IMAGE EST {IMAGE:658378}
2.1	297	139	Mus musculus hematopoietic lineage switch 2 (HLS2) mRNA, complete cds {IMAGE:876463}
2.1	285	137	ESTs {IMAGE:330825}
2.1	284	138	Farnesyltransferase, CAAX box, alpha {IMAGE:465152}
2.1	277	135	IMAGE EST {IMAGE:720096}
2.1	275	125	Palmitoyl-protein thioesterase {IMAGE:637934}
2.1	197	96	IMAGE EST {IMAGE:408747}
2.1	177	85	ESTs, moderately similar to E1B 19K/Bcl-2-interacting protein Nip3 [H.sapiens] {IMAGE:656945}
2.1	160	75	ESTs {IMAGE:837565}
2.1	150	70	ESTs {IMAGE:762555}
			IMAGE EST {IMAGE:595978}

2.1	103	50	IMAGE EST {IMAGE:350959}
2.2	2323	1060	Annexin V {IMAGE:426546}
2.2	925	421	ESTs {IMAGE:638302}
2.2	865	392	ESTs {IMAGE:891193}
2.2	859	386	ESTs, Highly similar to COMPLEMENT C1R COMPONENT PRECURSOR [Homo sapiens] {IMAGE:61781}
2.2	720	324	Complement component 2 (within H-2S) {IMAGE:851201}
2.2	703	316	Mus musculus transcription factor PBX3b (PBX3b) mRNA, complete cds {IMAGE:425881}
2.2	527	236	Ufo oncogene homolog {IMAGE:401608}
2.2	353	159	IMAGE EST {IMAGE:693565}
2.2	337	156	ESTs, Highly similar to glycogen phosphorylase [R.norvegicus] {IMAGE:807978}
2.2	305	140	ESTs {IMAGE:596754}
2.2	301	137	ESTs {IMAGE:678608}
2.2	275	125	ESTs {IMAGE:764398}
2.2	217	98	IMAGE EST {IMAGE:922298}
2.2	217	99	ESTs {IMAGE:581835}
2.2	203	94	ESTs, Weakly similar to cDNA EST EMBL:D71941 comes from this gene [C.elegans] {IMAGE:752290}
2.2	200	90	ESTs {IMAGE:679938}
2.2	182	84	IMAGE EST {IMAGE:597843}
2.2	158	73	ESTs {IMAGE:662476}
2.2	154	70	ESTs, Highly similar to HYPOTHETICAL 66.5 KD PROTEIN F02A9.5 IN CHROMOSOME III [Caenorhabditis]
2.2	153	70	IMAGE EST {IMAGE:671280}
2.2	142	66	IMAGE EST {IMAGE:463249}
2.2	123	55	IMAGE EST {IMAGE:834617}
2.2	95	44	ESTs {IMAGE:834572}
2.3	1245	540	Dkt1-like homolog (Drosophila) {IMAGE:407072}
2.3	893	393	IMAGE EST {IMAGE:846536}
2.3	812	360	IMAGE EST {IMAGE:425523}
2.3	760	332	Alcohol dehydrogenase 1, complex {IMAGE:695105}
2.3	494	219	Glycoprotein galactosyltransferase alpha 1, 3 {IMAGE:618535}
2.3	355	155	IMAGE EST {IMAGE:583632}
2.3	345	147	ESTs, Highly similar to NECDIN [Mus musculus] {IMAGE:476509}
2.3	304	132	ESTs {IMAGE:680450}
2.3	211	93	ESTs {IMAGE:576401}
2.3	210	91	IMAGE EST {IMAGE:574888}
2.3	180	79	ESTs, Highly similar to sorting nexin 1 [H.sapiens] {IMAGE:456862}
2.3	166	71	ESTs {IMAGE:808996}
2.3	154	68	ESTs {IMAGE:596030}

2.3	136	59	ESTs, Weakly similar to ZINC FINGER PROTEIN HF.12 [Homo sapiens] {IMAGE:761019}
2.4	4099	1700	Tenascin C {IMAGE:736372}
2.4	361	149	ESTs, Weakly similar to breast cancer suppressor candidate 1 [H.sapiens] {IMAGE:679316}
2.4	341	143	Mus musculus beta-galactoside binding lectin mRNA, complete cds {IMAGE:680815}
2.4	298	122	IMAGE EST {IMAGE:693148}
2.4	215	91	IMAGE EST {IMAGE:576974}
2.4	207	87	ESTs {IMAGE:458996}
2.4	194	80	IMAGE EST {IMAGE:733846}
2.4	178	74	IMAGE EST {IMAGE:385723}
2.4	151	63	ESTs, Moderately similar to E1B 19K/Bcl-2-interacting protein Nip3 [H.sapiens] {IMAGE:464020}
2.5	994	397	Mus musculus peroxisomal/mitochondrial dienyol-CoA isomerase ECH1p (Ech1) mRNA, complete cds {
2.5	381	155	IMAGE EST {IMAGE:775121}
2.5	345	137	Mus musculus transcription factor PBX1b (PBX1b) mRNA, complete cds {IMAGE:483688}
2.5	315	125	Mast cell growth factor {IMAGE:806850}
2.5	239	96	ESTs {IMAGE:401456}
2.5	200	81	Carnitine palmitoyltransferase 1, liver {IMAGE:737898}
2.5	184	73	IMAGE EST {IMAGE:775154}
2.5	173	70	ESTs {IMAGE:618926}
2.5	168	68	ESTs {IMAGE:949044}
2.5	159	63	IMAGE EST {IMAGE:790674}
2.6	1527	579	ESTs, Highly similar to COMPLEMENT C1R COMPONENT PRECURSOR [Homo sapiens] {IMAGE:72056
2.6	555	210	CD9 antigen {IMAGE:421714}
2.6	545	208	NEURONAL PROTEIN 3.1 {IMAGE:374970}
2.7	3610	1352	Kras oncogene-associated gene {IMAGE:860087}
2.7	1160	430	ESTs {IMAGE:850078}
2.7	1066	394	ESTs, Weakly similar to tazarotene-induced gene 2 [H.sapiens] {IMAGE:695491}
2.7	213	79	ESTs {IMAGE:467873}
2.8	698	248	ESTs, Highly similar to ACETYL-COA ACETYLTRANSFERASE PRECURSOR, MITOCHONDRIAL [Homo
2.8	296	104	ESTs, Highly similar to HYPOTHETICAL 47.9 KD PROTEIN B0303.3 IN CHROMOSOME III [Caenorhabdi
2.8	203	73	IMAGE EST {IMAGE:670393}
2.9	1983	675	Cystatin 3 {IMAGE:402614}
2.9	271	95	IMAGE EST {IMAGE:949656}
3	727	244	Malate dehydrogenase, soluble {IMAGE:318346}
3.1	597	194	Mus musculus LIM protein 3 (mSLIM3) mRNA, complete cds {IMAGE:457264}
3.2	738	228	ESTs, Highly similar to DERMATOPONTIN [Bos taurus] {IMAGE:330218}
3.2	529	166	Adenyate cyclase 7 {IMAGE:387280}
3.3	1545	473	Tissue inhibitor of metalloproteinase 2 {IMAGE:902923}

# TABLE 30 "continued"

3.3	558	171	ESTs, Highly similar to DESTRIIN [Homo sapiens; Sus scrofa] (IMAGE:335112)
3.3	351	106	IMAGE EST (IMAGE:876446)
3.3	247	75	IMAGE EST (IMAGE:920211)
3.4	1612	479	IMAGE EST (IMAGE:374228)
3.4	589	173	Erythrocyte protein band 4.1 (IMAGE:444037)
3.7	2263	609	Tissue inhibitor of metalloproteinase 2 (IMAGE:831964)
4.1	1504	370	ESTs, Moderately similar to COMPLEMENT C1S COMPONENT PRECURSOR [H. sapiens] (IMAGE:676171)

64 common genes upregulated by FSH, 024 & forskolin

Antigen identified by monoclonal antibodies 4F2 {IMAGE:478301}	478301	AA049696.1
Chaperonin subunit 4 (delta) {IMAGE:459668}	459668	AA027583.1
ESTs {IMAGE:350182}	350182	W34722.1
ESTs {IMAGE:424848}	424848	W98118.1
ESTs {IMAGE:426033}	426033	AA002836.1
ESTs {IMAGE:427480}	427480	AA002452.1
ESTs {IMAGE:477003}	477003	AA048121.1
ESTs {IMAGE:482641}	482641	AA061982.1
ESTs {IMAGE:483476}	483476	AA060036.1
ESTs {IMAGE:598824}	598824	AA168416.1
ESTs {IMAGE:640085}	640085	AA198542.1
ESTs {IMAGE:656089}	656089	AA239554.1
ESTs {IMAGE:680250}	680250	AA237600.1
ESTs {IMAGE:749313}	749313	AA288555.1
ESTs {IMAGE:818790}	818790	AA467382.1
ESTs {IMAGE:876063}	876063	AA475435.1
ESTs, Highly similar to CYSTATHIONINE GAMMA-L YASE [Homo	525119	AA096870.1
ESTs, Highly similar to CYSTATHIONINE GAMMA-L YASE [Homo	679235	AA245993.1
ESTs, Highly similar to REPLICATION PROTEIN A 14 KD SUBUN	425703	AA000318.1
ESTs, Highly similar to SERINE HYDROXYMETHYLTRANSFERAS	676311	AA208877.1
ESTs, Highly similar to (define not available 4929631) [H.sapiens	467379	AA036624.1
ESTs, Moderately similar to tumorous imaginal discs protein Tidf	478167	AA049615.1
ESTs, Weakly similar to (define not available 3874389) [C.elegans	334182	W16247.1
ESTs, Weakly similar to GARP PROTEIN PRECURSOR [H.sapiens	479076	AA048874.1
ESTs, Weakly similar to HYPOTHETICAL 11.4 KD PROTEIN C13G	579733	AA116946.1
ESTs, Weakly similar to ORF YGL231c [S.cerevisiae] {IMAGE:442	442681	AA015149.1
ESTs, Weakly similar to putative [C.elegans] {IMAGE:571422}	571422	AA109015.1
ESTs, Weakly similar to RING zinc finger protein [M.musculus] {I	922965	AA511365.1

ESTs, Weakly similar to similar to EF hand domains [C.elegans] {	337667	W18735.1
Extracellular matrix protein 1 {IMAGE:874833}	874833	AA474897.1
GALECTIN-3 {IMAGE:717226}	717226	AA403841.1
Glutamate oxaloacetate transaminase 1, soluble {IMAGE:481381}	481381	AA060494.1
Glutathione-S-transferase, alpha 3 {IMAGE:766582}	766582	AA274682.1
Growth arrest specific 2 {IMAGE:820540}	820540	AA423395.1
HEMATOPOIETIC CELL PROTEIN-TYROSINE PHOSPHATASE 70;	574608	A1323214.1
Heme oxygenase (decycling) 1 {IMAGE:677499}	677499	AA213167.1
Hormone receptor {IMAGE:439773}	439773	AA008625.1
IMAGE EST {IMAGE:315676}	315676	W09957.1
IMAGE EST {IMAGE:318157}	318157	W11665.1
IMAGE EST {IMAGE:330146}	330146	W11535.1
IMAGE EST {IMAGE:367445}	367445	W50706.1
IMAGE EST {IMAGE:437685}	437685	AA007828.1
IMAGE EST {IMAGE:466678}	466678	AA031159.1
IMAGE EST {IMAGE:467785}	467785	AA036495.1
IMAGE EST {IMAGE:479247}	479247	AA048730.1
IMAGE EST {IMAGE:480920}	480920	AA064247.1
IMAGE EST {IMAGE:483649}	483649	AA061366.1
IMAGE EST {IMAGE:622893}	622893	AA177702.1
IMAGE EST {IMAGE:635746}	635746	AA166372.1
IMAGE EST {IMAGE:681424}	681424	AA237757.1
IMAGE EST {IMAGE:790122}	790122	AA387971.1
IMAGE EST {IMAGE:874030}	874030	AA472200.1
Lymphocyte antigen 6 complex {IMAGE:580715}	580715	AA145865.1
Mouse mRNA for dbpA murine homologue, complete cds {IMAGE	481949	AA059953.1
Mus musculus A10 mRNA, partial cds {IMAGE:333376}	333376	W15888.1
Mus musculus A10 mRNA, partial cds {IMAGE:385441}	385441	W61383.1
Mus musculus elf-1A (elf-1A) mRNA, complete cds {IMAGE:7473	747322	AA274946.1
Mus musculus protein kinase C inhibitor (mPKC) mRNA, comple	533117	AA068901.1



# NOTES on the database

Mus musculus secreted carbonic anhydrase isozyme VI precursor	329940	AI327498.1
Mus musculus SH3-containing protein SH3P2 mRNA, partial cds	458781	AA024088.1
MYELOID DIFFERENTIATION PRIMARY RESPONSE PROTEIN MY	475803	AA050417.1
Nuclear, factor, erythroid derived 2, like 2 {IMAGE:475505}	475505	AA044475.1
T-complex testis expressed 1 {IMAGE:762306}	762306	AA277421.1
TRYPTOPHANYL-TRNA SYNTHETASE {IMAGE:367765}	367765	W53959.1

# 024 16hr time point 121 genes upregulated >= 2-fold 0226AAMG

Fold	Cont	24	Gene name	Acc#
2.7	1331	3587	antigen identified by monoclonal antibodies 4F2 {IMAGE:478301}	AA049696.1
5.1	136	694	carbonic anhydrase 6 {IMAGE:329940}	AI327498.1
2.2	165	366	CD39 antigen-like 4 {IMAGE:574894}	AA120757.1
2.6	213	564	chaperonin subunit 4 (delta) {IMAGE:459668}	AA027583.1
2.3	161	367	E26 avian leukemia oncogene 2, 3' domain {IMAGE:949055}	AA543913.1
2.7	486	1303	ESTs {IMAGE:315676}	W09957.1
3.3	577	1914	ESTs {IMAGE:350182}	W34722.1
2.1	336	689	ESTs {IMAGE:367445}	W50706.1
2	408	800	ESTs {IMAGE:386218}	W65070.1
2.2	479	1066	ESTs {IMAGE:404057}	W82577.1
2.3	558	1305	ESTs {IMAGE:419146}	W88005.1
2.1	290	597	ESTs {IMAGE:421524}	W97155.1
2.6	89	233	ESTs {IMAGE:424848}	W98118.1
3.3	241	786	ESTs {IMAGE:426033}	AA002836.1
2.4	93	219	ESTs {IMAGE:427480}	AA002452.1
2.4	296	699	ESTs {IMAGE:436999}	AA002783.1
2.1	187	392	ESTs {IMAGE:439411}	AA004111.1
2.2	329	726	ESTs {IMAGE:466678}	AA031159.1
2.7	236	643	ESTs {IMAGE:477003}	AA048121.1
2.5	153	378	ESTs {IMAGE:479247}	AA048730.1
2.3	176	403	ESTs {IMAGE:479913}	AA051561.1
2	71	139	ESTs {IMAGE:480197}	AA058059.1
4.8	287	1384	ESTs {IMAGE:482641}	AA061982.1
2.1	339	725	ESTs {IMAGE:483476}	AA060036.1
2	283	579	ESTs {IMAGE:483649}	AA061366.1
5.3	62	327	ESTs {IMAGE:598824}	AA168416.1
2.3	236	553	ESTs {IMAGE:618611}	AA174941.1
3.3	98	321	ESTs {IMAGE:620209}	AA177920.1
2.4	247	588	ESTs {IMAGE:622893}	AA177702.1

2.2	144	319	ESTs {IMAGE:635810}	AA185313.1
3.1	141	442	ESTs {IMAGE:640085}	AA198542.1
3.4	339	1168	ESTs {IMAGE:656089}	AA239554.1
2.4	256	607	ESTs {IMAGE:680250}	AA237600.1
2	356	714	ESTs {IMAGE:722625}	AA260445.1
2	132	264	ESTs {IMAGE:746599}	AA268055.1
2.4	91	219	ESTs {IMAGE:749313}	AA288555.1
2	235	480	ESTs {IMAGE:751826}	AA396152.1
2.2	169	373	ESTs {IMAGE:762306}	AA277421.1
2.6	176	456	ESTs {IMAGE:790122}	AA387971.1
2.6	101	263	ESTs {IMAGE:818790}	AA467382.1
2.1	131	270	ESTs {IMAGE:876063}	AA475435.1
2	103	201	ESTs {IMAGE:876106}	AA475528.1
5.1	200	1029	ESTs, Highly similar to CYSTATHIONINE GAMMA-LYASE [Homo sapien	AA096870.1
4.2	90	374	ESTs, Highly similar to CYSTATHIONINE GAMMA-LYASE [Homo sapien	AA245993.1
2.4	551	1318	ESTs, Highly similar to PUTATIVE ASPARAGINYL-TRNA SYNTHETASE I	AA399854.1
2.3	253	581	ESTs, Highly similar to REPLICATION PROTEIN A 14 KD SUBUNIT [Hor	AA000318.1
2	432	862	ESTs, Highly similar to SERINE HYDROXYMETHYL TRANSFERASE, MIT	AA208877.1
2.2	534	1166	ESTs, Highly similar to CGI-81 protein [H.sapiens] {IMAGE:467379}	AA036624.1
2.1	160	331	ESTs, Highly similar to db83 [R.norvegicus] {IMAGE:737629}	AA277149.1
2.1	259	538	ESTs, Highly similar to exportin t [H.sapiens] {IMAGE:639640}	AA197461.1
2.2	353	784	ESTs, Highly similar to pEachy [R.norvegicus] {IMAGE:747789}	AA274849.1
2.5	517	1293	ESTs, Highly similar to probable calcium-binding protein [H.sapiens] {IM	W18735.1
2.2	328	726	ESTs, Moderately similar to CHLORINE CHANNEL PROTEIN P64 [Bos ta	AA466508.1
2.3	313	717	ESTs, Moderately similar to Unknown [H.sapiens] {IMAGE:764677}	AA273209.1
2.3	256	586	ESTs, Weakly similar to (define not available 5852158) [M.musculus] {IM	AA275027.1
2.1	157	334	ESTs, Weakly similar to 3-OXOACYL-[ACYL-CARRIER PROTEIN] REDUC	W65003.1
2.7	436	1198	ESTs, Weakly similar to ACTIN POLYMERIZATION INHIBITOR [Gallus ga	AA003272.1
2.1	165	339	ESTs, Weakly similar to cDNA EST EMBL:D70402 comes from this gene	AA120013.1
3.3	532	1752	ESTs, Weakly similar to cDNA EST EMBL:D75506 comes from this gene	W16247.1
2	461	915	ESTs, Weakly similar to coded for by C. elegans cDNA yk157f8.5 [C.eleg	W43938.1
2.1	948	1978	ESTs, Weakly similar to GARP PROTEIN PRECURSOR [H.sapiens] {IMAC	AA048874.1

2.6	225	591	ESTs, Weakly similar to heat shock protein hsp40-3 [M.musculus] {IMAG	AA049615.1
2.2	248	546	ESTs, Weakly similar to HYPOTHETICAL 11.4 KD PROTEIN C13G6.04 IN	W11535.1
2.6	124	327	ESTs, Weakly similar to HYPOTHETICAL 11.4 KD PROTEIN C13G6.04 IN	AA116946.1
2	454	887	ESTs, Weakly similar to INTERFERON-INDUCED PROTEIN 6-16 PRECUR	W99140.1
2	366	732	ESTs, Weakly similar to LYMPHOCYTE ANTIGEN LY-6A.2/LY-6E.1 PREC	AA472994.1
2.1	166	343	ESTs, Weakly similar to ORF YGL231c [S.cerevisiae] {IMAGE:442681}	AA015149.1
2	232	469	ESTs, Weakly similar to putative [C.elegans] {IMAGE:571422}	AA109015.1
2.2	863	1882	ESTs, Weakly similar to SLK similar protein [M.musculus] {IMAGE:93349	AA542348.1
2	504	1006	ESTs, Weakly similar to similar to leucyl-tRNA synthetase [C.elegans] {I	W11665.1
3.4	203	681	extracellular matrix protein 1 {IMAGE:678765}	AA237378.1
4.7	417	1960	extracellular matrix protein 1 {IMAGE:874833}	AA474897.1
2	205	412	Fyn proto-oncogene {IMAGE:385072}	W62969.1
2.8	657	1835	glutamate oxaloacetate transaminase 1, soluble {IMAGE:481381}	AA060494.1
2.8	256	718	glutathione-S-transferase, alpha 3 {IMAGE:766582}	AA274682.1
3.5	486	1713	glutathione-S-transferase, alpha 4 {IMAGE:367627}	W54349.1
2.2	151	330	growth arrest specific 2 {IMAGE:820540}	AA423395.1
2.2	1082	2398	heat shock protein, 74 kDa, A {IMAGE:444027}	AA014915.1
3.4	189	636	heme oxygenase (decycling) 1 {IMAGE:677499}	AA213167.1
2	472	938	histidine triad nucleotide-binding protein {IMAGE:533117}	AA068901.1
2.3	523	1190	homeo box B9 {IMAGE:422746}	W97853.1
2.4	253	604	hormone receptor {IMAGE:439773}	AA008625.1
2.2	114	250	hormone receptor {IMAGE:641865}	AA209882.1
2.1	649	1345	HS1 binding protein {IMAGE:874591}	AA472437.1
2.3	469	1056	lectin, galactose binding, soluble 3 {IMAGE:717226}	AA403841.1
2.4	785	1868	lymphocyte antigen 6 complex {IMAGE:580715}	AA145865.1
2.5	285	724	lymphocyte antigen 6 complex, locus C {IMAGE:425855}	AA000712.1
2	205	410	metallothionein 1 {IMAGE:480920}	AA064247.1
2	548	1083	metallothionein 2 {IMAGE:643725}	AA203775.1
2.2	1035	2244	methylenetetrahydrofolate dehydrogenase (NAD+ dependent), methenyl	W84014.1
2.8	335	954	Mouse mRNA for dbpA murine homologue, complete cds {IMAGE:48194	AA059953.1
2.6	277	719	Mus musculus A10 mRNA, partial cds {IMAGE:333376}	W15888.1
2.5	509	1296	Mus musculus A10 mRNA, partial cds {IMAGE:385441}	W61383.1

2.8	821	2317	Mus musculus asparagine synthetase mRNA, complete cds {IMAGE:337	W29492.1
2.1	239	512	Mus musculus eIF-1A (eIF-1A) mRNA, complete cds {IMAGE:351631}	W41459.1
2.1	663	1420	Mus musculus eIF-1A (eIF-1A) mRNA, complete cds {IMAGE:747322}	AA274946.1
2.9	295	841	Mus musculus hsp40 mRNA for heat shock protein 40, complete cds {IM	W75670.1
2.7	340	902	Mus musculus mRNA for Sid1669p, complete cds {IMAGE:922965}	AA511365.1
2.2	248	538	Mus musculus SH3-containing protein SH3P2 mRNA, partial cds {IMAGE	AA024088.1
2.1	252	528	Mus musculus SH3-containing protein SH3P2 mRNA, partial cds {IMAGE	AA166372.1
2.3	246	559	Mus musculus thioredoxin mRNA, nuclear gene encoding mitochondrial	AA242573.1
2.1	620	1324	myelocytomatosis oncogene {IMAGE:441346}	AA009268.1
11.7	265	3097	myeloid differentiation primary response gene 116 {IMAGE:475803}	AA050417.1
2.3	512	1154	myosin, heavy polypeptide 8, skeletal muscle, perinatal {IMAGE:317476}	W13528.1
2.3	307	693	nuclear factor of activated T-cells, cytoplasmic 2 {IMAGE:904738}	AA521764.1
2.4	475	1126	nuclear, factor, erythroid derived 2, like 2 {IMAGE:475505}	AA044475.1
2	231	457	prion protein {IMAGE:421749}	W99102.1
2.9	68	197	protein tyrosine phosphatase, non-receptor type 8 {IMAGE:574608}	AI323214.1
2.3	170	397	Public domain EST {IMAGE:437685}	AA007828.1
2	153	301	Public domain EST {IMAGE:439033}	AA008240.1
4.1	179	740	Public domain EST {IMAGE:467785}	AA036495.1
2.2	267	596	Public domain EST {IMAGE:481400}	AA060500.1
2	312	636	Public domain EST {IMAGE:639704}	AA197393.1
2.1	80	166	Public domain EST {IMAGE:641223}	AA200448.1
2.2	186	403	Public domain EST {IMAGE:681424}	AA237757.1
2	208	412	Public domain EST {IMAGE:694065}	AA243954.1
2.1	174	362	Public domain EST {IMAGE:733734}	AA272876.1
2.1	341	700	Public domain EST {IMAGE:763628}	AA285580.1
2.1	398	848	Public domain EST {IMAGE:874030}	AA472200.1
2.2	376	820	stimulated by retinoic acid 14 {IMAGE:480896}	AA064241.1
2.7	192	520	tryptophanyl-tRNA synthetase {IMAGE:367765}	W53959.1

**Forskolin 16hr time point 106 genes upregulated  $\geq 2$ -fold 022DAAMH**

Fold	Cont	Forsk	Gene name	Acc#
2.1	1661	3449	antigen identified by monoclonal antibodies 4F2 {IMAGE:478301}	AA049696.1
4.1	183	750	carbonic anhydrase 6 {IMAGE:329940}	AI327498.1
2.4	227	552	chaperonin subunit 4 (delta) {IMAGE:459668}	AA027583.1
2.1	259	545	chondroitin sulfate proteoglycan 2 {IMAGE:355990}	W49048.1
2.1	624	1320	ESTs {IMAGE:315676}	W09957.1
2	424	859	ESTs {IMAGE:316914}	W11926.1
2	939	1885	ESTs {IMAGE:317466}	W34061.1
3.7	448	1660	ESTs {IMAGE:350182}	W34722.1
2.7	374	1004	ESTs {IMAGE:367445}	W50706.1
2.3	512	1203	ESTs {IMAGE:372421}	W53621.1
2	396	783	ESTs {IMAGE:386218}	W65070.1
2	85	169	ESTs {IMAGE:403166}	W82868.1
2	378	769	ESTs {IMAGE:404057}	W82577.1
2.5	106	270	ESTs {IMAGE:424848}	W98118.1
3.8	303	1150	ESTs {IMAGE:426033}	AA002836.1
2.4	140	339	ESTs {IMAGE:427480}	AA002452.1
2.1	365	761	ESTs {IMAGE:466678}	AA031159.1
2.8	272	757	ESTs {IMAGE:477003}	AA048121.1
2.3	154	352	ESTs {IMAGE:479247}	AA048730.1
6.2	209	1295	ESTs {IMAGE:482641}	AA061982.1
2.2	387	834	ESTs {IMAGE:483476}	AA060036.1
2.3	310	709	ESTs {IMAGE:483649}	AA061366.1
2.3	374	859	ESTs {IMAGE:572819}	AA110791.1
8.6	58	498	ESTs {IMAGE:598824}	AA168416.1
2.5	101	251	ESTs {IMAGE:620209}	AA177920.1
2.1	246	527	ESTs {IMAGE:622893}	AA177702.1
2	238	469	ESTs {IMAGE:636730}	AA189425.1
2.5	114	289	ESTs {IMAGE:640085}	AA198542.1

3.8	324	1223	ESTs {IMAGE:656089}	AA239554.1
2.2	258	564	ESTs {IMAGE:680250}	AA237600.1
2.7	52	139	ESTs {IMAGE:749313}	AA288555.1
2	121	236	ESTs {IMAGE:762306}	AA277421.1
2.7	226	607	ESTs {IMAGE:790122}	AA387971.1
4.7	59	278	ESTs {IMAGE:818790}	AA467382.1
2.3	120	274	ESTs {IMAGE:876063}	AA475435.1
4	149	602	ESTs, Highly similar to CYSTATIONINE GAMMA-LYASE [Homo sapiens]	AA096870.1
3.4	52	175	ESTs, Highly similar to CYSTATIONINE GAMMA-LYASE [Homo sapiens]	AA245993.1
2	683	1346	ESTs, Highly similar to DELTA 1-PYRROLINE-5-CARBOXYLATE SYNTHETASE [Rattus norvegicus]	W41878.1
2.7	200	531	ESTs, Highly similar to GLYPICAN-3 PRECURSOR [Rattus norvegicus]	AA274932.1
2.1	506	1072	ESTs, Highly similar to HAM1 PROTEIN [Saccharomyces cerevisiae]	W34474.1
2	372	761	ESTs, Highly similar to HYPOTHETICAL 25.7 KD PROTEIN IN MSH1-E	W54688.1
2.3	311	708	ESTs, Highly similar to REPLICATION PROTEIN A 14 KD SUBUNIT [Homo sapiens]	AA000318.1
2	304	602	ESTs, Highly similar to SERINE HYDROXYMETHYLTRANSFERASE, N	AA208877.1
11.6	916	10602	ESTs, Highly similar to acid ceramidase [M. musculus]	AA286605.1
2.1	574	1206	ESTs, Highly similar to Cgl-81 protein [H. sapiens]	AA036624.1
2	224	443	ESTs, Highly similar to HSPC040 protein [H. sapiens]	W08432.1
2.1	657	1358	ESTs, Highly similar to probable calcium-binding protein [H. sapiens]	W18735.1
2.2	377	828	ESTs, Highly similar to similar to Schizosaccharomyces pombe splicing factor	W11916.1
2.1	359	744	ESTs, Moderately similar to NADH-UBIQUINONE OXIDOREDUCTASE	W97248.1
3.2	715	2301	ESTs, Weakly similar to cDNA EST EMBL:D75506 comes from this gene	W16247.1
2.2	658	1423	ESTs, Weakly similar to GARP PROTEIN PRECURSOR [H. sapiens]	AA048874.1
2.6	245	642	ESTs, Weakly similar to heat shock protein hsp40-3 [M. musculus]	AA049615.1
2.7	1071	2916	ESTs, Weakly similar to HISTIDINE-RICH PROTEIN KE4 [M. musculus]	W18585.1
2.5	218	551	ESTs, Weakly similar to HYPOTHETICAL 11.4 KD PROTEIN C13G6.04	W11535.1
2	161	330	ESTs, Weakly similar to HYPOTHETICAL 11.4 KD PROTEIN C13G6.04	AA116946.1
2.3	300	698	ESTs, Weakly similar to LYMPHOCYTE ANTIGEN LY-6A.2/LY-6E.1 PRI	AA472994.1
2.1	124	263	ESTs, Weakly similar to mCAC [M. musculus]	W40994.1
2.5	212	536	ESTs, Weakly similar to ORF YGL231c [S. cerevisiae]	AA015149.1

2	177	359	ESTs, Weakly similar to putative [C.elegans] {IMAGE:571422}	AA109015.1
2.3	724	1644	ESTs, Weakly similar to similar to leucyl-tRNA synthetase [C.elegans]	W11665.1
2.9	1092	3190	ESTs, Weakly similar to similar to nucleotide translocator [C.elegans]	AA213247.1
3.7	193	721	extracellular matrix protein 1 {IMAGE:678765}	AA237378.1
7.4	369	2744	extracellular matrix protein 1 {IMAGE:874833}	AA474897.1
2.9	497	1443	glutamate oxaloacetate transaminase 1, soluble {IMAGE:481381}	AA060494.1
3	254	755	glutathione-S-transferase, alpha 3 {IMAGE:766582}	AA274682.1
2.7	427	1169	glutathione-S-transferase, alpha 4 {IMAGE:367627}	W54349.1
3	108	326	growth arrest specific 2 {IMAGE:820540}	AA423395.1
3.2	198	627	heme oxygenase (decycling) 1 {IMAGE:677499}	AA213167.1
2	291	570	histidine triad nucleotide-binding protein {IMAGE:533117}	AA068901.1
2.3	283	658	hormone receptor {IMAGE:439773}	AA008625.1
2	87	174	hormone receptor {IMAGE:641865}	AA209882.1
2.6	482	1263	lectin, galactose binding, soluble 3 {IMAGE:717226}	AA403841.1
3	608	1820	lymphocyte antigen 6 complex {IMAGE:580715}	AA145865.1
3.6	371	1333	lymphocyte antigen 6 complex, locus C {IMAGE:425855}	AA000712.1
2.1	312	640	male enhanced antigen 1 {IMAGE:463746}	AA028786.1
2.4	435	1058	metallothionein 1 {IMAGE:480068}	AA051654.1
2.6	183	475	metallothionein 1 {IMAGE:480920}	AA064247.1
2.2	324	718	Mouse chromatin nonhistone high mobility group protein (HGM-I(Y), c	AA538243.1
2.2	463	1033	Mouse mRNA for dbpA murine homologue, complete cds {IMAGE:481	AA059953.1
2	219	428	Mus musculus A10 mRNA, partial cds {IMAGE:333376}	W15888.1
2.1	673	1403	Mus musculus A10 mRNA, partial cds {IMAGE:385441}	W61383.1
2	646	1292	Mus musculus eIF-1A (eIF-1A) mRNA, complete cds {IMAGE:747322}	AA274946.1
2.2	363	786	Mus musculus mRNA for HIRA-interacting protein (HIRIP5) {IMAGE:7	AA270607.1
2.6	344	878	Mus musculus mRNA for Sid1669p, complete cds {IMAGE:922965}	AA511365.1
2.9	253	730	Mus musculus SH3-containing protein SH3P2 mRNA, partial cds {IMA	AA024088.1
2.5	148	372	Mus musculus SH3-containing protein SH3P2 mRNA, partial cds {IMA	AA166372.1
10.6	268	2833	myeloid differentiation primary response gene 116 {IMAGE:475803}	AA050417.1
2.3	652	1470	myosin, heavy polypeptide 8, skeletal muscle, perinatal {IMAGE:3174	W13528.1



